Pending Claims

USPTO Application No.: 10/663,103

This listing of claims is a courtesy copy of the pending claims. No amendments have been made in this Reply.

Listing of Claims:

1. (previously presented) A method for establishing headroom to provide margin in determining available transmit power value for a mobile station operating in a wireless communication system comprising the steps of:

determining, by the mobile station, a communication channel variance condition, wherein the communication channel variance condition is at least one of a primary pilot power variance, fading period and fade depth estimate, or a peak-to-average estimate within an adaptive measurement interval; and

establishing, by the mobile station, a headroom value based on the communication channel variance condition.

- 2. (canceled)
- 3. (previously presented) A method according to claim 1 wherein the mobile station determines a maximum data rate based on the headroom value and sends the maximum data rate to a base station.
- 4. (previously presented) A method according to claim 1 wherein the mobile station determines a maximum data rate based on the headroom value and sends a rate adjustment request to a base station.
- 5. (previously presented) A method according to claim 1 further comprising the steps of: detecting a battery condition of the mobile station; and modifying the headroom value based on the battery condition.

6. (original) A method according to claim 5 wherein the step of modifying the headroom value based on the battery condition comprises:

determining if the battery condition relates to a low battery level; and if the battery condition relates to a low battery level, increasing the headroom value.

7. (previously presented) A method according to claim 1 wherein the step of determining a communication channel variance condition includes measuring a variance in a primary pilot power.

8-11. (canceled)

12. (previously presented) A mobile station comprising:

means for determining, by the mobile station, a communication channel variance condition, wherein the communication channel variance condition is at least one of a primary pilot power variance, fading period and fade depth estimate, or a peak-to-average estimate within an adaptive measurement interval; and

means for establishing, by the mobile station, a headroom value based on the communication channel variance condition.

- 13. (original) A mobile station according to claim 12 further comprising: means for determining a maximum data rate based on the headroom value; and means for sending the maximum data rate to a base station.
- 14. (original) A mobile station according to claim 12 further comprising: means for determining a maximum data rate based on the headroom value; and means for sending a rate adjustment request to a base station.
- 15. (original) A mobile station according to claim 12 further comprising: means for detecting a battery condition of the mobile station; and means for modifying the headroom value based on the battery condition.

- 16. (previously presented) A wireless communication system comprising:
 - a base station;
 - at least one mobile station;

means for determining, by the at least one mobile station, a communication channel variance condition, wherein the communication channel variance condition is at least one of a primary pilot power variance, fading period and fade depth estimate, or a peak-to-average estimate within an adaptive measurement interval; and

means for establishing, by the at least one mobile station, a headroom value based on the communication channel variance condition.

- 17. (original) A wireless communication system according to claim 16 further comprising: means for determining a data rate based on the headroom value.
- 18. (original) A wireless communication system according to claim 17 further comprising: means for sending the data rate between the base station and said at least one mobile station.
- 19. (original) A wireless communication system according to claim 16 further comprising: means for determining a battery condition of said at least one mobile station; and means for modifying the headroom value based on the battery condition.
- 20. (original) A wireless communication system according to claim 19 further comprising: means for determining a data rate based on the headroom value; and means for sending the data rate between said at least one mobile station and the base station.